UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,326	03/02/2004	James J. Wang	22770	1809

535 7590 04/02/2008

K.F. ROSS P.C.
5683 RIVERDALE AVENUE
SUITE 203 BOX 900
BRONX, NY 10471-0900

EXAMINER	
HELM, CARALYNNE E	

ART UNIT	PAPER NUMBER
1615	

MAIL DATE	DELIVERY MODE
04/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/791,326	WANG ET AL.	
	Examiner	Art Unit	
	CARALYNNE HELM	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Group II in the reply filed on August 8, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Applicant has canceled the claims drawn to the invention of the nonelected group; therefore no claims are being withdrawn due to the election. The restriction is deemed proper and thereby made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The four factual inquiries of Graham v. John Deere Co. have been fully analyzed and considered in the rejections that follow.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanno et al. (U.S. Patent No. 6,153,698) in view of Harashima et al. (U.S. Patent No. 5,837,793) and Fukunaga et al. (U.S. Patent No. 5,803,887).

Kanno et al. teach a silicone composite powder where a silicone rubber fine particle core is coated with a silicone resin (see column 9 lines 52-55). Kanno et al. also teach that this core is spherical (see column 9 line 67-column 10 line 1). Further, Kanno et al. teach polymethylsilsesquioxane as a silicone resin and exemplify a particular 1-30μm in diameter composite powder where it is a component (see column 9 lines 27 and 31-34 and column 12 lines 31-32 - Fukunaga et al. teach this same composite particle as a polymethylsilsesquioxane structured as a 2-ply particle with a silicone rubber core coated with the silicone resin in column 4 lines 57-60 and 64-66). Although Kanno et al. do teach a silicone rubber core comprising the monomer unit dimethyl polysiloxane, they do not specifically teach polydimethylsiloxane (see column 9 lines 57-66). Harashima et al. teach a silicone rubber powder that is polydimethylsiloxane (see claim 5). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare the silicone composite particle of Kanno et al. with the known silicone rubber, polydimethylsiloxane, and polymethylsilsesquioxane. The

modified Kanno et al. reference does not teach a diameter range of 2-10μm explicitly. However, at the time of the claimed invention, it would have been well within the purview of one of ordinary skill in the art at the time of the invention to optimize such a parameter as a matter of routine experimentation, particularly since Kanno et al. do teach a slightly broader diameter range that encompasses the claimed range. Thus claim 25 is obvious over Kanno et al. in view of Harashima et al. and Fukunaga et al.

Claims 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanno et al. in view of Harashima et al. and Fukunaga et al. as applied to claim 25 above, and further in view of Tamori et al. (U.S. Patent No. 6,726,997).

Kanno et al. in view of Harashima et al. and Fukunaga et al. make obvious a silicone composite powder with polydimethylsiloxane and polymethylsilsesquioxane. Instant claims 27 and 29-34 are product-by-process claims that add no structural limitations to the claimed product. According to MPEP 2113, "'[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.' In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)." Therefore the limitations of these claims are automatically met when the limitations of the actual product are met (e.g. instant claims 25 and 26). The configuration taught by the modified Kanno et al. reference is a coated core, however, the combination of the two silicone components in a single powder has a limited number of alternate configurations. Generally, the two components (A and B) could be physically mixed (e.g. core and shell vs. A dispersed in B vs. B dispersed in A), each with or

without chemical bonding between A and B or since the components are polymer networks, they could be combined such that these networks are interlaced within one another. Tamori et al. teach a composite polymer particle where the constituent polymers form an interpenetrating polymer network (see claim 12; instant claim 26). Further Tamori et al. also teach that polyorganosiloxane polymers are included in this composite (see column 4 lines 35-37; instant claim 25). Thus since it was known to one of ordinary skill in the art that a silicone composite particle could be configured such that polymers formed an interpenetrating network, it would have been obvious to make the polydimethylsiloxane/polymethylsilsesquioxane composite of the modified Kanno et al. reference where these polymers were arranged in an interpenetrating network. The reference does not teach the proportions of polydimethylsiloxane and polymethylsilsesquioxane used in the composite powder. However, at the time of the claimed invention, it would have been well within the purview of one of ordinary skill in the art to optimize such a parameter as a matter of routine experimentation. Therefore claims 25-34 are obvious over Kanno et al. in view of Harashima et al., Fukunaga et al. and Tamori et al.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Thursday 8-5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caralynne Helm/
Examiner, Art Unit 1615

/Michael P Woodward/
Supervisory Patent Examiner, Art Unit 1615